



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,516	02/11/2002	Gregory M. Shreve	KSU .P. 222	5308

21324 7590 04/04/2006

HAHN LOESER & PARKS, LLP
One GOJO Plaza
Suite 300
AKRON, OH 44311-1076

EXAMINER

PIERRE, MYRIAM

ART UNIT	PAPER NUMBER
----------	--------------

2626

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/073,516	SHREVE, GREGORY M.	
	Examiner	Art Unit	
	Myriam Pierre	2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 01/18/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 and 47-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 and 47-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Regarding Amendment filed 01/18/2006 in response to the Office Action of 10/13/2005, examiner approves of the amended claims 8-9, 11, 20-21, 47, 50, 52-53, and 57-60; cancelled claims 39-46; examiner withdraws the objections to claims 11, and 39-46.

Response to Arguments

2. Applicant's arguments filed 01/18/2006 have been fully considered but they are not persuasive.

Applicant argues that Fritz et al. (6,134,552) do not teach multiple languages, concept-based glossaries, or with the discovery and tagging of internal linguistic and document features and structures, examiner respectfully disagrees, limitations that are not in claim 1. Fritz et al. do teach multiple languages (Fig. 4, translation to French, translation to Spanish), concept-based (col. 6 lines 25-26), or with the discovery and tagging of internal linguistic and document features (language and format, col. 6 lines 4-10) and structures (Fig. 13, tagging logical object or documents; col. 6 lines 4-10). However, none of these limitations are in claim 1, therefore, the argument of what Fritz et al. do not teach is moot if it is not in claim 1. Fritz et al. do teach discovering and tagging internal document features (Fig. 13 element 1304) and structures (Fig. 14 element 1408. structure relation), building models of document collection for purposes of creating parameters used by intelligent agents (content access and management agent, Fig. 1 element 110) to enhance the corpuse for specific purposes including translation (Fig. 4 elements 404 and 406), and replication method for creating multiple language versions (version content is translated into Spanish and French, Fig. 4 elements 402, 404, and 410). Fritz et al. do not

explicitly teach “statistical corpus analysis”, however, this is an inherent process, in order for any document retrieval, (performed by the IR content Access and Management Agent), there would inherently have to be statistical analysis of which application best fits the searches performed by the document view (browsing).

Applicant argues that Fritz does not teach or suggest aggregating documents (document collection) for the purpose of translation or localization. Examiner respectfully disagrees. Fritz et al. do teach translation (Fig. 4 elements 404 and 406; translation to French and Spanish).

Applicant argues that no modeling of the document is conducted since, as the name implies, the “physical object” physically exists as an electronic file within the information repository. Examiner respectfully disagrees. the document is modeled, there are three classes of modeling, as follows: physical object (document), logical objects (documents), and components. The actual component is a file (col. 8 line 54-55). The physical object (document) are not the files, the component is the file. In content model, the physical objects are not files themselves but refer to a file (MS word), this is common in any word processors, documents or objects are saved and referred to as files in order to easily retrieve them. The physical objects (documents), such as PH_4 is built or modeled, by two components HTML (mark up language) or GIF (Graphical Image Format). The actual physical document is going to be recreated or modeled in HTML or GIF, col. 6 lines 24-34, col. 8 line 55.

Applicant argues that via this modeling, parameters are created that previously did not exist which gives the collection of documents (corpus) structure. No such process of information discovery is taught or suggested by Fritz. Examiner respectfully disagrees. Fritz et al. do teach managing objects (documents) having various versions by using a three-tiered content model

(col. 2 lines 21-37), all of which has parameters or attributes, which are not the same for various versions, gives the collection of corpus structure (Fig. 14 element 1408). Fritz et al. do teach via this modeling, parameters are created that previously did not exist which gives the collection of documents (corpus) structure.

Applicant argues that Fritz contain no structure or enhancement parameters produced by agents. Examiner respectfully disagrees. Fritz teach structure (Fig. 14 element 1408) produced by agents (IR, (Content Access and Management Agent)), col. 11 lines 8-27. Fritz contain structure or enhancement parameters produced by agents.

Applicant argues that there is no coordinate physical object (files) within either the corpus or uni-corpus, unlike Fritz, whose whole system involves coordinating access to and viewing and editing of physical objects within the information repository. Examiner respectfully disagrees. These documents are within a corpus or uni-corpus because of the structural relation for one context, Fig. 14 element 1408, the collection relation is modeled as physical documents or objects being obtained within the collection for logical document or object 1402, and col. 11 lines 15-23. The component is the file, not the object. The component belongs to the physical object (document), col. 8 lines 53-66. For instance, the source corpus example is "IR Report v4.0", the uni-corpus are a combo of each files, each deriving from another file ending in the source corpus, in which one is in HTTP format (external repositories), all four files are one uni-corpus and are derived from the source corpus which is element 304, col. 6 lines 66-67; col. 7 lines 1-4 and 6 lines 42-55. Applicant argues that there is coordinate files within either the corpus or uni-corpus.

Applicant argues that Fritz et al. produces and contains no “enhanced” structures and does not produce enhancement parameters for programming an intelligent agent. Examiner respectfully disagrees. Fritz et al. teach both Structure relation and structure relations for one context, Fig. 14 element 1408, so, Fritz et al. do produce and contain “enhanced” structures by providing structural relations for context, Fig. 5 example of context attributes (language or formatting), the context is sent to the IR (agent) through the client application. The IR also control the internal relations for templets, hyperlink, and structures, col. 8 lines 35-40 and col. 9 lines 20-25. Fritz et al. do produce enhancement parameters for programming an intelligent agent.

Applicant argues that unlike Fritz, the physical objects displayed must reside in his information repository. Examiner respectfully disagrees. Fritz et al. teach both external and internal extraction of information, col. 8 lines 20-22 and col. col. 9 lines 14-19. Fritz et al. do teach that the physical objects displayed reside in external and internal information repository

Applicant argues that Fritz does not describe anywhere the process of the replication of a corpus or information repository across language. Examiner respectfully disagrees. Fritz et al. teach both copying and creating new versions of a document, col. 7 lines 27-31 and 67 and Fig. 4 (Spanish and French versions), thus modeling or creation of new documents does occur. Fritz does describe anywhere the process of the replication of a corpus or information repository across language

Applicant argues such a process, seeks similar terms and structures in completely separate and distinct repository for the purpose of creating an artificially enhanced uni-corpus that can be used monolingually to support translation or localization by automatically creating a

second corpus in other languages. Examiner respectfully disagrees. Fritz et al. do teach separate repository for uni-corpus, documents are within a corpus or uni-corpus because of the structural relation for one context, Fig. 14 element 1408, the collection relation is modeled as physical documents or objects being obtained within the collection for logical document or object 1402, and col. 11 lines 15-23. Furthermore, the enhanced uni-corpus is used in either one language or localization or the translation of the language, Fig. 4. These translations are inherently performed by parsing, tagging, and the basic functions required to translate a document, translation itself inherently means tagging and parsing and seeking similar terms in order to complete the process of translation. Since Fritz et al. teach translation, col. 9 lines 32-34, then Fritz et al. inherently has the process involved with what it takes to perform a translation, which is seeking similar terms and structures. Fritz et al. do teach seeking similar terms and structures in completely separate and distinct repository for the purpose of creating an artificially enhanced uni-corpus that can be used monolingually to support translation or localization by automatically creating a second corpus in other languages.

Applicant argues that Fritz et al. do not teach heuristic models. Examiner respectfully disagrees. In order for Fritz et al. to create versions, there must be an inherent model in which to create a new or updated version, this requires searching for the older version or model and updating the new one, col. 9 lines 25-34. Fritz et al. do teach heuristic models.

Section 103 rejection

Applicant argues that Morimoto et al. (6,789,057) does not deal with the ability to discover other objects (related to linguistic content and document structure) that are useful in

translation. Examiner believes the argument is moot because Fritz et al. do teach context resolution which requires document relation, this process takes language into account, thus, would necessarily include using language documents in the translation process, col. 9 lines 32-65. Therefore, Fritz et. al does not ignore the main contribution to the claim.

Applicant argues that Hartrick et al. (5,532,920) is not concerned with accessing a source corpus with an intelligent agent to analyze the source corpus, however, Fritz et al. do these features, so the argument is moot.

Applicant argues that neither Fritz et al. nor Hartrick et al. do not teach or suggest the independent claim 47. Examiner respectfully disagrees. Fritz et al. do teach content access agent, where the customer has a source corpus of documents to be managed, col. 7 lines 27-56 and col. 5 lines 15-27, Fig. 3 element 304), and tag the selected objects with a metatag (Fig. 3 element 304, "attributes" "language" "content", Fig. 3 element 306 via translation and format conversion in element 310, both derived from Management Agent or intelligent agent in Fig. 1 element 108), wherein said intelligent agent uses said parameters (physical objects) to identify and tag objects of interest in said external document repositories (Management Agent access "Info Repository", col. 6 lines 16-21) and selectively retrieve the objects to enhance the source corpus (Figs. 3 element 310 and col. 6 lines 25-37); and tracking rights in said retrieved objects (col. 7 lines 40-55); and Hartrick et al. teach rights to determine a royalty payable to an owner of the rights (the management of copying and printing operations for a softcopy document by a data processor, so as to comply with royalty payment requirements for making copies of the document, col. 1 lines 10-15). Fritz et al. in combination with Hartrick et al. do teach or suggest the independent claim 47.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 18-27, 29-38, 48-60 are rejected under 35 U.S.C. 102(b) as being anticipated by Fritz et al. (6,134,552).

As to claim 1, Fritz et al. teach a method of document management utilizing document corpora comprising:

gathering a source corpus of documents in electronic form (Fig. 1 elements 104 and 106);
modeling the source corpus in terms of document and domain structure information to identify corpus enhancement parameters (Fig. 3 element 306 is an enhancement of element 304);
using a meta-language (Fig. 3 element 304, “language” and “version” and “attributes”) to electronically tag the source corpus (meta-information is language captured from editor with which object was created or generated by the information repository, Fig. 3 element 306 and col. 6 lines 16-20, logical objects contains language descriptions of all the documents);

programming the corpus enhancement parameters (three tiered IR, information repository, content model) into an intelligent agent (IR document management agent/system, Fig. 1 element 108) (col. 6 lines 42-55; the three tiered IR content model has meta-information or attributes such as format and language, the three tiered IR content model is intrinsic or inherent

in the IR document management system, thus, the three tiered content info is a system which is programmed to be the intelligent agent);

using the intelligent agent (IR document management system) to search external repositories to find similar terms and structures (Fig. 14 element 1408), and return them to the source corpora, whereby the source corpus is enhanced to form a uni-corpus (col. 6 lines 66-67; col. 7 lines 1-4 and 6 lines 42-55; the source corpus example is “IR Report v4.0”, the uni-corpus are each files, each deriving from another file ending in the source corpus, in which one is in HTTP format (external repositories), all four files are one uni-corpus and are derived from the source corpus which is 304).

At to claim 2, which depends on claim 1, Fritz et al. discloses replicating the uni-corpus in at least one language other than the language of the uni-corpus (Fig. 3 element 306 is a copy of uni-corpus 304).

At to claim 3, which depends on claim 2, Fritz et al. discloses uni-corpus replication includes translating terms in the uni-corpus with a machine dictionary (Fig. 1a.1 Info Repository, IR web server) (col. 6 lines 54-57 and Fig. 1a.2 element 132 and Fig. 4; the IR document management system does the translation, which inherently is part of a machine/computer, thus a machine dictionary is used to translate words from one language to the next).

At to claim 18, which depends on claim 1, Fritz et al. discloses

providing access to the uni-corpus over a peer-to-peer network (Fig. 1 element 102 is inherent peer-to-peer, col. 5 lines 15-26 and lines 51-63 and col. 4 lines 37-40).

At to claim 19, which depends on claim 18, Fritz et al. discloses two uni-corpora are connected via the peer-to-peer network, such that sharing of resources occurs between the uni-corpora (Fig. 1 element 102 and 108 files are shared, and col. 5 lines 50-63 and col. 4 lines 37-40).

At to claim 20, Fritz et al. teach a global documentation method comprising:
providing the search parameters to an intelligent agent (Fig. 5 “content attribute” has parameters such as language and format);
enhancing the source corpus by accessing resources outside (Fig. 1a.a element 146 and 148) of the source corpus with the intelligent agent, (Fig. 1a.1, source corpus is in the database accessed via the IR content and Management Agent) where said intelligent agent tags the modeled source corpus and retrieves resources according to the search parameters to create a first uni-corpus of tagged documents (Fig. 3, tags are “attributes” in elements 304, 306, 308, and 310);

replicating the first uni-corpus (Fig. 3 elements 304) in at least one other language (element 306) to form a second uni-corpus (Fig. 3 element 310); and

selectively mining at least one uni-corpus to perform a selected task (Fig. 4 and col. 8 lines 18-40; data mining via translation from reference document to “content” version and

“content” change).

At to claim 21, which depends on claim 20, Fritz et al. discloses providing access to at least one uni-corpus via a shared network (Fig. 1 element 102 and 108 files are shared, and col. 5 lines 50-63).

At to claim 22, which depends on claim 21, Fritz et al. discloses shared network is a peer-to-peer network (Fig. 1 elements 102 & 108 are inherent peer-to-peer, col. 5 lines 15-26 and lines 51-63 and col. 5 lines 50-63 and col. 4 lines 37-40).

At to claim 23, which depends on claim 21, Fritz et al. discloses inherent routing documents between uni-corpora (Fig. 3 element 304) connected on the peer-to-peer network to a user (Fig. 1 elements 102 and 108 and col. 4 lines 37-40).

At to claim 24, which depends on claim 23, Fritz et al. discloses tracking the routing of the documents (Fig. 10.1 and Fig. 10.3 col. 8 lines 55-67; user is allowed to view or track the content category which has the routing/order of the documents).

At to claim 25, which depends on claim 24, Fritz et al. discloses managing rights (checkout/check-in) to the documents (content access agent) routed across the peer-to-peer network (Fig. 1 elements 102 and 108) (content access agent, check out

or check in of documents, col. 13 lines 34-37 and col. 7 lines 46-66 and col. 4 lines 37-40; IR checks status to ensure that document is not yet checked in and not currently checked out, network is inherently in Fig. 1 elements 102 and 108).

At to claim 26, which depends on claim 20, Fritz et al. discloses the first uni-corpus has a plurality of terms wherein replicating includes pre-populating the second uni-corpus (Fig. 3; pre-populating via tagging) by using machine translations of at least a portion of said first uni-corpus terms (col. 6 lines 54-57 and Fig. 1a.2 element 132 and Fig. 4; the IR document management system does the translation, which inherently has a machine dictionary via a server to translate words from one language to the next, thus a machine translation).

At to claim 27, which depends on claim 26, Fritz et al. discloses analyzing the machine translated terms to define remaining terms in the first uni-corpus (Fig. 4 document collection, content change for language translation, machine translation terms are pre-populated via analysis and Fig. 23.3 “update registry and update file properties”).

At to claim 29, which depends on claim 27, Fritz et al. discloses analyzing includes performing a natural language analysis of the first uni-corpus terms (col. 6 lines 17-24; col. 8 lines 55-67 and Fig. 4; content category would inherently perform natural language analysis in order to find out the proper category to place each document or file).

At to claim 30, Fritz et al. teach a document management method comprising:
constructing models of a source corpus of documents (Fig. 3 element 306 is a model of element 304);
deriving parameters from said models for the operation of an intelligent agent (information objects, physical or logical) over at least one external document repository (IR) (Figs. 1 and 3, external document via element 108 and col. 8 lines 18-20 and Fig. 9); and
enhancing the source corpus of documents by adding selected documents retrieved by the intelligent agent to form an artificially enhanced corpus (adding component via Fig. 1 element 102 and col. 6 lines 24-37).

At to claim 31, which depends on claim 30, Fritz et al. discloses
analyzing the artificially enhanced corpus to discover objects useful for at least one task (Fig. 22 element 2212, col. 13 lines 18-22; Fig. 3, task can be storing names for each logical object); and
tagging the objects (Fig. 3, tags are “attributes”) within the artificially enhanced corpus to allow for identification (“PH_2” Fig. 3 element 306), description (language=E, Fig. 3 element 306), and retrieval of the objects (Fig. 1 element 104, logical object properties, stored) (col. 13 lines 17-21).

At to claim 32, which depends on claim 30, Fritz et al. discloses

replicating the artificially enhanced corpus in a second language (Fig. 3 translation from element 304 to 306).

At to claim 33, which depends on claim 32, Fritz et al. discloses performing cross-linguistic alignment of the second language artificially enhanced corpus and the first artificially enhanced corpus and tagging objects within the corpora according to the alignment (Fig. 3 elements 304 and 306, translation document is tagged and cross-linguistic alignment is inherently performed via the translation and linking process).

At to claim 34, which depends on claim 33, Fritz et al. discloses pre-populating terminology management and translation memory management components of a computer-assisted translation workstation with the objects tagged in the second language artificially enhanced corpus (Fig. 3 elements 304 and 306; col. 6 lines 24-37; re-populating terminology management is via the translation process and tagging of second language is in Fig. 3 element 306).

At to claim 35, which depends on claim 30, Fritz et al. discloses linking the artificially enhanced corpora (Fig. 1 element 104) to at least one other artificially enhanced corpus (Fig. 1 element 102) using a peer-to-peer network (col. 4 lines 37-40).

At to claim 36, which depends on claim 35, Fritz et al. discloses

the intelligent agent adds documents (document edition, Fig. 1 element 102) to the artificially enhanced corpus from another artificially enhanced corpus (Fig. 1a.2 and col. 5 lines 43-49) located on the peer-to-peer network (col. 4 lines 37-40).

At to claim 37, which depends on claim 30, Fritz et al. discloses the external document repository (Fig. 1 element 102 and 104) includes the internet (www) (col. 4 lines 37-40).

At to claim 38, which depends on claim 30, Fritz et al. discloses the external document repository (Fig. 1 element 108, Information Repository) includes other corpora resident (Fig. 1 element 104, viewer application) on a peer-to-peer network (Fig. 1; col. 4 lines 37-40).

As to claim 48 Fritz et al. teach a document management system, in which a document manager is linked to a plurality of unicorpora via a peer-to-peer network, the document management system including a method of providing document management services including authoring and translation comprising:

receiving a document management request from a uni-corpora in the network (Fig. 1 element 104 and Fig. 3);

programming an intelligent agent with a set of parameters responsive to the request (Fig. 2, programming done thru parameters such as physical object and language format and component, elements 204, 206 and 208);

deploying the intelligent agent to search uni-corpora in the peer-to-peer network to identify objects responsive to the request (Fig. 1 and col. 5 lines 14-26); and transmitting the objects to the requesting uni-corpus by way of the peer-to-peer network (Fig. 1 and col. 5 lines 14-26).

As to claim 49, which depends on claim 48, Fritz et al. discloses assembling the identified objects according to the parameters into a document (Fig. 13, “Hyperlink Reference” is attached to the document, via the parameters from the Tag ID, element 1312)

As to claim 50, Fritz et al. teach an intelligent agent in a document management method comprising:

a program containing parameters derived from heuristic models of a source corpus, (Fig. 3 element 302 and Fig. 18 element 1902, language version and language content parameters); wherein said parameters are implemented in said program to locate and retrieve documents from external document repositories (Fig. 1 element 102 and col. 5 lines 14-26).

As to claim 51, Fritz et al. teach an intelligent agent used in a document management method comprising:

an inherent program including a tagging subroutine operating under parameters (Fig. 3 elements 304 and 306 and col. 5 lines 39-50; subroutine Physical Object is tagged “Attributes” such as “ID” “language” and “content”),

said parameters causing the program to search a corpus and directing the tagging subroutine to tag language objects within the corpus (Fig. 3 element 304 and 306; language is tagged “D” and “E” respectively).

As to claim 52, Fritz et al. teach an intelligent agent for searching external corpora comprising a processor having search parameters programmed to:

search (edit) external corpora according to the parameters for content (Fig. 1 element 102 and col. 5 lines 1-4),

tag said content identified in the search (col. 6 lines 54-65; search via hyperlink), a selectively retrieve the content (col. 6 lines 54-65 and Fig. 1 element 104).

As to claim 53, which depends on claim 52, Fritz et al. discloses the content includes document structures (Fig. 14 element 1408 and 1402, 1412 and 1414, col. 11 lines 16-27; structure relation concept of documents).

As to claim 54, which depends on claim 52, Fritz et al. discloses the content includes document models (Fig. 10; document model “Sales Order” and fig. 17 “evaluate relation, get phys. object (model); “modeling report” file is an information class groups all documents that should be treated in a common specific manner, col. 11 lines 55-60).

As to claim 55, which depends on claim 52, Fritz et al. discloses

the content includes objects (Fig. 10.2 element 1008, object such as content repository).

As to claim 56, which depends on claim 52, Fritz et al. discloses
the content includes concepts (content category, Fig. 10.2 element 1006; content
category, col. 8 lines 55-67; content category acts as a logical descriptor).

As to claim 57, Fritz et al. teach computer readable media tangibly embodying a program
of instructions executable by a computer to perform a method of enhancing a source corpus in a
document management system comprising:

receiving inherent electronic signals (web browser, view application col. 5 lines 1-6;
inherent in computer which has electronic signals) representing first parameters including
document structure (Fig. 19) and document domain (topic, element 1902) information regarding
the source corpus ("Root Physical Object", col. 12 lines 1-9);

searching external document repositories (Fig. 1 element 108) according to the first
parameters to identify (attributes) and tag document domain and structure information (Fig. 19)
in the external document repositories according to the first parameters (attributes, col. 9 lines 35-
45; derive new translation or version or content through editing the content, thus searching
external document according to attributes such as logical object and tagging done in Fig. 19 of
the external documents according to the class or relation); and

reporting the tagged information for selective retrieval of the tagged information (Fig. 13,
col. 10 lines 47-65).

As to claim 58, which depends on claim 57, Fritz et al. discloses
analyzing the tagged information to create a heuristic model defining document domain
and document structure (Fig. 19, “structure”) information as a second parameter (Fig. 19 second
parameter is element 1904); and
causing an inherent electronic signals representing the second parameter (Fig. 19 element
1902) to be reported to a document management server to update said first parameters (first
parameter is updated via the translation, col. 12 lines 10-15).

As to claim 59, Fritz et al. teach computer readable media tangibly embodying a program
of instructions executable by a computer to perform a method of managing documents in a
document management system comprising:

constructing heuristic models including a domain model and a document structure model
in a source corpus of documents (Fig. 19; modeling via predefined relations and content, col. 11
lines 55-60 and col. 12 lines 11-18);

using the heuristic models to derive parameters for the operation of an intelligent agent
over at least one external document repository (Fig. 19 and Fig. 1 “info repository”; col. 12 lines
5-14 and col. 11 lines 55-60; parameters such as logic objects are structured in the IR system);
and

enhancing the source corpus of documents by adding selected documents using the
intelligent agent operating under the direction of parameters derived from the heuristic models to
form an artificially enhanced corpus (Fig. 6, elements 608 and 610, documents are added using

process in Fig. 4 and Fig. 1 element 108).

As to claim 60, Fritz et al. teach a document management system, in which a source corpus is enhanced by the use of an intelligent agent to create an artificially enhanced corpus by a method comprising:

receiving electronic signals (web browser, view application col. 5 lines 1-6; inherent in computer which has electronic signals) for representing a document from the intelligent agent (Fig. 1 element 108), the document including domain (Fig. 19 element 1902) and structure information (Fig. 19 and modeling via predefined relations and content, col. 12 lines 1-18);

performing heuristic modeling of the source corpora and the received document (Fig. 3 element 302 and Fig. 18 element 1902, modeling language version and language content parameters col. 12 lines 1-8 and col. 11 lines 55-60); and

sending inherent electronic signals representing search parameters (user request to view content through a Web browser via the IR URL) derived from the modeling to the intelligent agent (IR) requesting another document according to the search parameters (for displaying content, the IR offers URL from an object ID and context, the ID can be application object (document) that is linked to the IR object, col. 12 lines 34-51 and col. 11 lines 55-65; col. 5 lines 1-6; electrical signals representing search parameters are inherent in computer and monitor system).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 4-17 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fritz et al. (6,134,552) in view of Morimoto et al. (6,789,057).

At to claim 4, which depends on claim 3, Fritz et al. discloses depends on, Fritz et al. further discloses translation (Fig. 3 and 4).

Fritz et al. does not explicitly teach analysis of undefined terms.

However, Morimoto et al. teach performing an analysis of terms surrounding an undefined term to translate the undefined term (unknown words, hypothesis file, dictionary retrieval, col. 14 lines 53-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fritz's document management system with Morimoto's dictionary retrieval to perform an analysis of terms surrounding an undefined term because this would provide correct document translation (Morimoto, col. 2 lines 43-49).

At to claim 5, which depends on claim 4, Fritz et al. discloses the analysis includes performing an inherent natural language analysis (col. 6 lines 17-24; col. 8 lines 55-67 and Fig. 4; content category would inherently perform natural language analysis in order to find out the proper category to place each document or file).

At to claim 6, which depends on claim 4, Fritz et al. discloses an inherent analysis (translation, col. 6 lines 17-24).

Fritz et al. does not explicitly teach statistical analysis.

However, Morimoto et al. teach

the analysis includes a statistical analysis (unknown words, hypothesis set, syntactic analysis, col. 14 lines 45-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fritz's document management system with Morimoto's dictionary retrieval in order to store the proper candidate translation, as taught by Morimoto, col. 2 lines 43-49, col. 6 lines 17-24, and col. 15 lines 1-6.

At to claim 7, which depends on claim 6, Fritz et al. discloses mining the uni-corpus, wherein mining includes locating tagged objects within the uni-corpus (Fig. 6 inherently involves data mining elements 604, 608, 610 and Fig. 3-4 tagging elements 304 and 306).

At to claim 8, which depends on claim 7, Fritz et al. discloses mining of the uni-corpus (sales Order, Fig. 10.4 and "component" in Fig. 10.1 element 1002 and Fig. 6) includes extraction of concept systems (Fig. 10.4 "content of the content category").

At to claim 9, which depends on claim 8, Fritz et al. discloses wherein the extraction of concept systems includes inherently determining semantic relations between individual concepts (col. 11 lines 54-67, Fig. 17, element 1704 “create relation class” between file or physical object and info class, elements 1702 and 1706, which inherently involves semantic relations.).

At to claim 10, which depends on claim 5, Fritz et al. discloses replicating the uni-corpus in at least one other language to form a second uni-corpus, wherein the second uni-corpus is mined to obtain useful objects in the other language (col. 3 lines 24-37; Fig. 3, uni-corpus is element 304, other language is “language =E” and mined information is extracted in physical object in element 310, such as “component” “GIF file”).

At to claim 11, which depends on claim 10, Fritz et al. discloses the mining is performed selectively to assist in a task (Fig. 22 element 2212, col. 13 lines 18-22; Fig. 3; mining is performed via the task of translating from one language to another).

At to claim 12, which depends on claim 11, Fritz et al. discloses task includes authoring a document (content access agent requires user registration, col. 7 lines 30-40).

At to claim 13, which depends on claim 11, Fritz et al. discloses

task includes content based searching (document view or browsing, Fig. 1 element 102 and col. 5 lines 1-7).

At to claim 14, which depends on claim 11, Fritz et al. discloses
task includes document management (Fig. 1a.1 element 124 and col. 5 lines 1-6 and col. 7 lines 7-10; IR, information repository, management system).

At to claim 15, which depends on claim 11, Fritz et al. discloses
task includes content management (Fig. 1 element 112, and col. 5 lines 1-6 and col. 7 lines 7-10, IR Management System is context resolution, which inherently involves content management of data).

At to claim 16, which depends on claim 11, Fritz et al. discloses
task includes translation (Fig. 3).

At to claim 17, which depends on claim 16, Fritz et al. discloses
translation includes corpus based machine translation (col. 6 lines 54-57 and Fig. 1a.2 element 132 and Fig. 4; the IR document management system does the translation, which inherently has a machine dictionary to translate words from one language to the next).

At to claim 28, which depends on claim 17, Fritz et al. discloses
analyzing (col. 6 lines 17-24; col. 8 lines 55-67 and Fig. 4).

Fritz et al. does not explicitly teach statistical analysis of terms adjacent to un-translated terms.

However Morimoto et al. teach analyzing includes a statistical analysis (hypothesis record) of terms adjacent to the un-translated terms (Fig. 19 FIFO and latch and col. 14 lines 61-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fritz's document management system with Morimoto's dictionary retrieval because this would provide the user with correct grammar (Morimoto, col. 2 lines 50-60, col. 6 lines 17-24, and col. 15 lines 1-6).

3. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fritz et al. (6,134,552) in view of Hartrick et al. (5,532,920).

As to claim 47 Fritz et al. teach a document management system operating according to a business method comprising:

providing document management services (content access agent) including translation and authoring services over a global information network to a customer (content access agent, author of changing an original must go through content access agent and register, col. 7 lines 27-56 and col. 5 lines 15-27), where the customer has a source corpus of documents to be managed (col. 7 lines 31-36 and 60-67);

accessing the source corpus with an intelligent agent to analyze the source corpus (Fig. 1 element 108), identify selected objects within the source corpus (Fig. 3 element 304), and tag the selected objects with a metatag (Fig. 3 element 304, "attributes" "language" "content"), wherein

the analysis results in the generation of document parameters programmed into the intelligent agent for searching of external document repositories (Fig. 3 element 306 via translation and format conversion in element 310, both derived from Management Agent or intelligent agent in Fig. 1 element 108), wherein said intelligent agent uses said parameters (physical objects) to identify and tag objects of interest in said external document repositories (Management Agent access "Info Repository", col. 6 lines 16-21) and selectively retrieve the objects to enhance the source corpus (Figs. 3 element 310 and col. 6 lines 25-37); and tracking rights in said retrieved objects (col. 7 lines 40-55).

Fritz does not explicitly teach rights to determine a royalty payable to an owner of the rights.

However, Hartrick et al. teach rights to determine a royalty payable to an owner of the rights (the management of copying and printing operations for a softcopy document by a data processor, so as to comply with royalty payment requirements for making copies of the document, col. 1 lines 10-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fritz's document management system with Hartrick's soft-copying of books because this would allow users to have protection over soft-copy ownership, thus this would ensure the enforcement or prevention of free copying. (Hartrick, col. 2 lines 64-65).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Myriam Pierre whose telephone number is 571-272-7611. The examiner can normally be reached on Monday - Friday from 5:30 a.m. - 2:00p.m.

6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

7. Information as to the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

03/27/2005 MP


RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER